

Amendments to the Specification

Please replace the two paragraphs extending from page 6, line 15 to page 7, line 7 with the following amended paragraphs:

Both theoretical and experimental work have demonstrated the efficient guidance of light in a two-dimensional photonic crystal slab waveguide device (see “Demonstration of Highly Efficient Waveguiding in a Photonic Crystal Slab at the 1.5 μ m Wavelength”, S. Lin, E. Chow, S. Johnson and J. Joannopoulos, Opt. Lett. 25, pp 1297-1299, 2000). In addition, there has been some investigation into potential applications for interacting with the guided optical modes of the waveguide device. Applications that have previously been discussed include tunable, waveguide dependent devices (see commonly owned, copending U.S. Patent Application Serial No. ~~09/846,056~~ 09/846,856) and channel drop filters (see U.S. Patent No. 6,130,969).

Photonic crystal devices such as are discussed in U.S. Patent Application Serial No. ~~09/846,056~~ 09/846,856 do not extract and redirect specific wavelengths as are needed in a WDM communications system. In addition, although the tunability of such devices has been demonstrated, the range of tuning of the devices is rather limited. U.S. Patent No. 6,130,969 discloses a photonic crystal channel drop filter for WDM communications systems; however, the described filter is not tunable. For a drop filter to function effectively in a WDM system, it is desirable that the filter be tunable over a full range of operating frequencies. Thus, existing photonic crystal-based devices are generally not fully satisfactory for use as an extraction device in a WDM system.